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A
SHORT DESCRIPTION
OF
PYRMONT,

WITH
OBSERVATIONS on the Use of its WATERS.

A B R I D G E D

From the German "DESCRIPTION of PYRMONT of
" DR. MARCARD, *Physician to his Majesty's Household at*
" *Hanover, Member of the Royal Academy of Sciences at*
" *Naples, and of the Medical Societies at Paris, Edinburgh,*
" *and Copenhagen.*"

REVISED BY THE AUTHOR.

L O N D O N :

PRINTED FOR J. JOHNSON, NO. 72, ST. PAUL'S
CHURCH-YARD,

M.DCC.LXXXVIII.

[Price One Shilling and Six-Pence.]

P R E F A C E.

THE Description of Pyrmont, (Beschreibung von Pyrmont) by Dr. Marcard, of Hanover, originally written in German, and translated into French *, was thought too voluminous to be wholly translated into the English language. But as Pyrmont is a very remarkable place, and its water much valued and used in England, and the wells and baths resorted to by patients coming from this country, it seemed not an useless undertaking to give an abstract of the contents.

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This

* The title of the French is : " Description de Pyrmont, par M. Marcard, Medicin de la Cour d'Hanovre, &c. Vol. I. and II. Leipzig, chez Weidmann et Reich."

There is a third volume to be published. It is ornamented with some well-executed prints, representing views of the place and country, and some remarkable objects. This work may be procured in German or French by Mr. Johnson, Bookseller, in St. Paul's Church-yard; and Mr. Elmsley, in the Strand: it is also to be had of the *Veuve du Chêne* at Paris.

P R E F A C E.

This Pamphlet has the advantage of having been revised by the Author of the original work ; and he has added several things which are not yet published, but reserved for the third Volume.

We hope the present publication will be found to contain some useful matter, and to give our readers a tolerable idea of the place and waters described. Those who wish farther information, will have recourse to Dr. Marcard's larger work.

N. B. The miles mentioned in the course of this Pamphlet are to be understood as *English miles*.

C O N-

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E R R A T A.

Page 5, note, line 3, from the bottom, for *tuf* read *tufa*.

— 9, note, line 4, 5, for *but every person must furnish his own wine*, read *including a moderate quantity of good wine*.

— 13, line 7, for *fabricated* read *evolved from*.

— 17, line 4, for *sal amarum* read *sal cathart. amar.*

— 24, line 15, dele (*mers*).

— 25, line 12, for *as* read *whereas*.

— 28, line 9, for *then* read *than*.

— 32, line 1, for *nervous* read *nerves*.

— 37, line 9, for *cachetic* read *cachectic*.

— 47, line 19, for *effests* read *effects*.

A
SHORT DESCRIPTION
OF
PYRMONT,
WITH
OBSERVATIONS on the Use of its WATERS.

CHAP. I.

Description of the Place and its Conveniences.

THE village of Pyrmont, so celebrated through many centuries for its mineral waters, lies within the circle of Westphalia, not far from the Weser, about ten miles distant from Hameln, thirty-five from Hanover, forty-five from Cassel, fifty from Osnabruck, sixty from Bremen, and seventy from Brunswick.

The vale in which these springs take their rise is one of the most healthy in Germany, chearful, fertile, and sufficiently extensive ; it appears as if it were formed to inspire gaiety and tranquillity, to charm by its natural beauties, and to delight by the many embellishments with which it abounds. The different wells which are close to each other, are situated towards the northern extremity of the village, a spot commanding a most beautiful view over the highly-cultivated plain, in which are several smaller hamlets, and particularly the little town of Lugde, containing a monastery of Franciscan friars. There is also a salt-work, and several mills on a trout stream, remarkable for its produce, called the Emmer, which flows through the rich pastures in the centre of the vale. The surrounding hills add a variety to this quiet scene, both from the beauty of their cultivation below and their majestic tops above, which are covered with forest trees, and intersected by various avenues, for the accommodation of those who choose to extend their airings beyond the limits of the plain. The roads in summer are very safe and good throughout all this district ; and the approach

approach to the village, which was formerly through a narrow, steep, hollow way, is now converted into an open and easy descent. The castle of the Prince of Waldeck (to whom, as Count of Pyrmont, this whole place belongs) has an elegant appearance, and renders its neighbourhood still more pleasing, from the hospitality and politeness of its owner to all who frequent his possessions.

As Nature has exerted herself to beautify the country which encircles these salutary springs, so Art has not been deficient in contributing towards the embellishment of the scene. A variety of walks and avenues have been made in the vicinity of the wells for the convenience of the company, among which is one that cannot be passed unnoticed, from its extraordinary grandeur, and the many advantages it affords to the place. This famous walk consists of three avenues, divided by four rows of lofty trees, planted in the year 1668, which at all times afford a cool and shady retreat. It is about 500 yards in length, and 40 in breadth, and runs in a gentle descent from north to south. At the upper end of it

is a colonade, leading to an octagonal temple, which covers the well ; and at the lower, a jet d'eau, formed by the natural force of the overflowing source. On both sides are shops somewhat in the style of those at Tunbridge, but superior in the wares they expose, being the produce of various countries, brought hither to tempt strangers by the novelty, as well as the elegance of their manufacture. About the centre is the Ball-room, and contiguous to it the Theatre, so that on this enchanting spot every amusement, as well as convenience, is at hand. Here is also a public breakfast every morning at nine o'clock for people of rank and fashion, at which parties are generally made for dinner, that is decently served, and on moderate terms, by a *traiteur* (or person who undertakes to serve the company with provisions) in the open air ; or should the weather prove unfavourable, it is held in a saloon adjoining to the Ball-room. But these resources are not often necessary, from the soil being naturally such as to admit of greater indulgencies here than in most other places, for by neither yielding to rain nor drought, it is
always

always clean and never dusty *. These advantages are so alluring, that from six o'clock in the morning until ten at night there is constantly company in the walk. Parties also for coffee, cards, conversations, and every other kind of social intercourse, are promiscuously made upon it: nor is music wanting to complete its amusements, as an excellent band is regularly engaged for the season, who, by changing their instruments, afford a variety to their harmony, scarcely to be conceived by those who are unacquainted with the talents of

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German

* I cannot but notice this as a circumstance worthy of the attention of all who frequent Pyrmont. The nature of the soil, particularly visible in the principal walks, being of such a composition, as neither to be affected by wet or drought. A continued rain makes little or no impression upon it, even while it is falling, and in an hour afterwards the earth recovers its former consistence, and may be trodden without impression: nor will the protracted heat of the dog-days operate upon the surface or interior parts of it, so as to produce cracks in the one, or dust on the other. I have been at some pains to discover the cause of so peculiar an advantage, and have reason to suppose that it proceeds from a mixture of calcarious iron stone (tuf) with an argillaceous earth; at least these chiefly compose the walks that are of such value to the place.

German performers. There are ordinaries also for people of the inferior sort, and served at a lower price ; but as the spaciousness of this walk would even admit of many more tables than are required, without the smallest inconvenience to any one, it must be confessed, that these innocent festivities add greatly to the scene, and afford a vivacity unknown and impracticable at any other place.

The very extraordinary beneficial qualities of the Pyrmont waters, and the delights of the spot, have made it long a place of great resort. In the year 1556, people flocked to these salutary springs from every part of Europe, and their numbers amounted at one time to 10,000. In the summer 1681, upwards of forty personages of royal and sovereign rank were assembled there, and among them was George I. then a young prince, and Frederic Willhelm, the great elector of Brandenburg. This collection of great personages, the most numerous indeed that ever honoured at the same time any public place, excited such attention, that an account of it, though erroneous as to numbers, was published at Paris in the *Mercure Galant* of that

that year—" *de ce que s'est passé entre les 27*
" Altesſes à Pyrmont."

The great king of Prussia had twice recourse to this place for the benefit of his health, and is ſaid to have formed, during his firſt reſidence here, the plan of the firſt glorious Sileſian war. But whether this be true or not, it is certain, that a few weeks after his departure he opened the firſt campaign. There is a hill, about half a mile from the village, which ſtill retains his name (Koenigſberg), as it was his delight to retire to it for the enjoyment of the proſpect, which is beyond deſcription beautiful, from a ſeat erected on his favourite point of view.

The regular ſucceſſion of company every year, has naturally awakened the invention of enterprizing minds to add every convenience to the ſalubrity of Pyrmont. Furniſhed lodgings are to be had in abundance, and at a reaſonable rate, in private houſes. Here is alſo a ſpacious hotel called the Bathing-houſe, which was opened in the year 1778, by a ſet of gentlemen who entered into a ſubſcription for the building, and ſupplying it with baths,

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which

which vie with any for their elegance as well as convenience, and every invention for the external use of these waters. It abounds also with well furnished apartments for the accommodation of strangers, as various in their size as price, which, to prevent impositions, is written over the door of every room. The advantages of being under such a roof are too striking not to ensure a succession of guests, especially among such as, for the sake of the baths, would prefer the lodgings here to those in private houses. The proprietors, therefore, have dedicated a spacious room for a public table, which is served by a *traiteur* in the house, on the same terms as before-mentioned, in which every thing is included except the wine, and as an arrangement has taken place for regulating the prices of this article, by consulting the tariff, or tablet, on which they are specified, all imposition may be avoided. The coffee-house has also undergone a similar regulation, so that the nicest calculation may be formed of the daily expence to the stranger, while he remains at Pyrmont*.

But

* If a stranger chuse only to hire a bed-room, and content himself with the use of the public rooms through the day,

But should a more private way of life be preferred, or found expedient, a table may be supplied with as little trouble and expence in the separate apartments of this or any other house, as it only consists of four or five dishes, very decently dressed, and should they not be thought sufficient, any addition may be made. But these are luxuries seldom in request, as the consequences of a splendid table must obviously militate against the effect of the waters. Indeed the great regularity which distinguishes the way of life at Pyrmont, must give it a preference over many other baths, where every excess from pampered appetites and lateness of hours is encouraged. It should not, however, be understood, that amusements are wanting, or that a dull, sedentary course is necessary to be adhered to. On the contrary, every relaxation of the mind, every moderate exercise of the body, is preferable
to

day, he may have it at 10s. 6d. a week. Private lodgings, consisting of three furnished rooms, and accommodation for a servant, may be had at 1l. 10s. per week. The expence of the table will not exceed 5s. a day, but every person must furnish his own wine. From what I was informed I am led to conclude, that the expence of Spa is fully double that of Pyrmont.

to it, and in some degree requisite, to assist the waters in their operations; even dancing is allowed, if it be not carried to excess, and, in consequence, the band is at any time removed from the walk into the Ball-room, whenever the whole or any part of the company may wish to partake of such an innocent recreation. Nor has Pyrmont charms only for those who have health and spirits for such exercises. It has comforts within the reach of the old and the young, the invalid and the convalescent, arising from the society which every body is at liberty to partake of. Pedigree here, contrary to the rules of most other parts of Germany, gives no exclusive privilege. People of merit, science, and good breeding, are indiscriminately admitted into any circle, and indeed such as are possessed of these superior qualifications, are generally sought out without any reference to the number of their quarterings, or the antiquity of their family. In a word, the whole plan of life, as it is here laid down, may be truly said to be founded on good sense, and fraught with every contrivance to promote health and rational amusement.

C H A P. II.

Description of the Neighbourhood of Pyrmont:

THE district of Pyrmont abounds with many notable antiquities as well as natural curiosities. The site of the castle of Arminius, now a mere desolate hill, but retaining evident traces of a fortified post, though the works are totally destroyed, is about four miles from the wells, and, after the account which is given of it in the description of Pyrmont, may excite the curiosity of the traveller. Some historians have asserted this to have been the place where the antient Germans worshiped Irmensul, an idol erected in honour of Arminius, and which was destroyed by Charlemagne; but though events of such an early date are difficult to ascertain, it is beyond a doubt that Arminius, not far from hence, a little to the south, overcame three Roman legions commanded by Varus, and in the course of as many days put him to death with his 20,000 men. About six years afterwards, his own forces

were

were defeated by Germanicus on the other side of the Wefer, but he himself escaped.

There are some other ruins in the environs of Pyrmont, and one in particular called *Shell Pyrmont*, an antient residence of its Counts. It was built in 1183, and has been deserted upwards of 400 years, but as these are subjects worthy of a more ample description, they cannot have justice done them without exceeding the limits of this pamphlet.

Among the natural curiosities, after the mineral waters, nothing is more remarkable than a vaporous cavern, about a quarter of a mile from the wells, through which issues forth such a quantity of fixed air from the bowels of the earth, as to require caution in its approach. It is unquestionably similar in its nature to the *Grotta del Cane* at Naples, but so superior in its effects, as hardly to admit of a comparison. In the one, the vapours confine themselves to the height of two feet; but in the other, they rise, in dry and calm weather, and frequently on the eve of a storm, to that of fifteen feet, and so powerfully,

fully, as to suffocate any one who should attempt to draw breath within their reach. Many useful and curious experiments may here be made, which would not be practicable any where else.

This cavern shews the immense quantity of aerial acid, which is fabricated in the soil of Pyrmont; for notwithstanding the vent it has in this place, every spring, whether chalybeate or not, is thoroughly impregnated with it; and as a proof of it, should there by chance any remains of a shower lie round the wells, the substance of a double pavement cannot interrupt its operation; an infinity of bubbles will issue forth, the clearest demonstration of the quantity of elastic fluid, which is in the circumference of this district.

About a mile and a half from the wells are three remarkable spots, where the ground fell in many years ago, and formed these deep cavities, which are now in some measure filled by water, and prove that formerly these were caverns in the heart of the earth, which not being any longer able to support the weight
above

above them, have been filled up as far as the soil would furnish the materials ; but by its sinking from the surface, one defect found its remedy from another, and exposed to view the chasms into which the neighbouring springs have formed the phænomenon here alluded to.

C H A P. III.

*On the different Mineral Springs at Pyrmont,
and their Compositions.*

OF all the known chalybeate acidulous waters, that of Pyrmont has hitherto been esteemed the strongest, and must continue so until some farther discoveries shall be made : of late, however, some others, by quack representations, have endeavoured to share the good fortune of Pyrmont. Its chief mineral spring, according to an analysis of it by Mr. Westrumb, of Hameln, a most able and ingenious chemist, contains in a pound of water

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ter somewhat more than a grain of iron, dissolved by fixed air only.

Mr. Bergman has found out, that such a quantity of water can contain but little more than one grain of iron dissolved by fixed air. With this free fixed air the Pyrmont water abounds more than any other whatever; for when a glass of it is taken out of the well, a gush of bubbles spring from the bottom of it, equal to the most sparkling Champaign *. Some further experiments have shewn, that sixteen cubic inches of this water, which has been preserved some time in a bottle, will yield the incredible quantity of twenty-three inches of air in its free and expanded state; and, as water which is taken fresh from the well, will always yield two or three inches more, we may reckon, that Pyrmont water in this state contains from twenty-five to twenty-

* Dr. Donald Monro, who has been himself at Pyrmont, says, in his Treatise on Mineral Waters, Vol. I. p. 410. "It is a very brisk, spirity chalybeate, which, as taken from the fountain, sparkles like the briskest Champaign wine, and to me had something of the taste of the finest old hock, which had lost a great deal of its acidity by age."

twenty-six inches of fixed air in sixteen inches of water. But should any other spring apparently approach in this respect to that of Pyrmont, no comparison can be admitted, until a proper enquiry may be made into the proportion of the calcarious earth it contains; for in every grain of that earth there is at least one inch of fixed air, which is set at liberty by analyzation, but remains inactive when drank, and therefore can be of no use to the patient. To avoid the errors which are naturally attendant on false appearances, a regard should be paid to experiments on other waters, and among them to that of Driburg. Much has been said of its fixed air, but no mention has been made of its enormous quantity of calcarious earth—a most palpable omission—since it is known, that the quantity of the one must annihilate the effects of the other; while the lime, together with a collection of selenites, or gypsum, renders the water excessively hard and heavy to stomachs that are not of the strongest texture. This shews the superiority of Pyrmont, to other sources in the produce of that salutary volatile ingredient we call aerial acid, or fixed air. As to the rest of
 them,

them, they are all fixed ingredients, and consist of about eight grains and a half of magnesia to a pound of the water, nearly seven grains and a half of sal amarum, three of sal Glauberi, a few of calcarious earth, some sal marinum and selenite, and a small portion of resinous matter. The remaining ones, being only discoverable in a microscope, are trifling, and it is scarcely worth noticing, that a few grains of an argilacious or filicious nature are found in an hundred pounds of water*.

Upon the whole, therefore, this spring, from whence the water is not merely drank upon the spot, but bottles filled are sent all over the world, will be found to contain in each pound from twenty-eight to twenty-nine grains of solid matter.

The temperature of the well is 57 degrees of Fahrenheit's thermometer, and never varies in Summer or Winter.

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* For the detail of the chemical analysis we must refer to the first volume of the *Description de Pyrmont*.

It is from this fountain that the Pyrmont water is sent all over the globe, to the Eastern as well as the Western world, and for many years a great quantity to England.

This water, at the well where it springs, is undoubtedly preferable to the use of it at a distance, partly because the bath may be joined to it at this place, and partly because the water loses something by bottling it, whatever precaution may be taken. However, it is still an important medicine, and the physicians of England, as well as private persons, who have experienced its salutary effects, will join me in the encomium I have made upon it. It is bottled up with so much care and disinterestedness, that, to preserve all the quality of the water, especially its volatile part, the bottles are corked immediately after they are filled, although one fifth of them not being able to resist the force of the elastic fluid they contain, are sure to be broken within the first twenty-four hours. Now and then, in warm weather, particularly at the approach of a thunder storm, the fixed air will burst half of them. To avoid the loss of too many in
warm

warm weather, it is always carried over land by night.

That the care which is taken to keep in the force of the water proves effectual, I have seen a remarkable confirmation of. When I was, in 1785, at Laufanne, at the celebrated Dr. Tissot's, this great physician told me, that he had Pyrmont water in his cellar which was there ever since the year 1770, consequently fifteen years; he had opened a bottle of it seven years ago, which proved then to be very good. We opened some bottles, and though it had lost something of its force, it was still very pleasant to drink, and retained still so much of its original flavour and force, that it was declared, at that period of time, stronger than the fresh Seltzer water, which was compared with it.

Besides this spring, which is called the principal one, there are some others of inferior qualities, and the chief of which is, that which supplies the baths, and flows in prodigious quantities. This water contains the same principles as the one we have already

described; it has less aerial acid, but some grains more of the fixed ingredients. Its composition and abundance renders it extremely useful for what it is assigned, viz. for bathing. It will supply immediately from the well any quantity of water that could be required for that purpose, whereas, from the scarcity of water in other baths, it is necessary to keep it for some time, so that much of its spirit is lost before use.

There are three more wells near it, which I shall briefly notice here.

The first is the SAUERLING, a very light and agreeable acidulous water, and more drank for pleasure than for medical use. In hot weather, by mixing it with wine or lemon juice and sugar, it makes a most refreshing and agreeable drink; and indeed it is now and then used as an alterative to cool the blood and correct its humours.

The second, called the AUGEN BRUNNEN, is generally employed externally for the eyes. It is a slight chalybeate water, somewhat cooler

cooler than the rest of the springs, and may be applied in cases where the Pyrmont water would be too strong.

The third is the NEU BRUNNEN, or new well, about a mile from the village, of a remarkable quality, and promising to be of real use. Its composition is nearly the same as the Pyrmont water, but it has a good deal of diphlogisticated martial vitriol, more sal commune, and less terrestrial particles, so that it cannot but prove of a particular good effect in such cases of relaxation as require a more astringent treatment.

C H A P. IV.

*On the Effects of the internal Use of the
Pyrmont Water.*

AS this mineral water is particularly remarkable for the great quantity of that elastic fluid, called fixed air, or acidulous gas, which it contains, so it owes its activity, in a great measure, to that ingredient. This penetrating substance, by its searching quality, pervades the whole body, and as it occasions a kind of giddiness when drank in the morning, it evidently affects those more internal parts of the human frame, which are the source of all motion and sensation, I mean the brain and the nerves. It is no wonder then, that the Pyrmont water should be able to produce some alterations in those parts, and cure several disorders to which the nerves are liable ; as, on the contrary, it may, in some cases which we shall mention hereafter, where it is improperly used, be equally noxious. There is no doubt, that in many cases where it cures nervous disorders, which, it is well known,

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it does, a great part of this effect may be attributed to this subtile part of its composition; though we are not able to explain the manner of its operation upon the nerves. In general, the effects of this volatile principle are to render the motions in the body more energetic and lively, and to augment the vivacity of the operations, without increasfing the quickness of the pulse. By means of it the water affects almost every excretion; and as this acedulous gas, by its action on the solids, becomes at the same time a powerful corrector of the humours, producing a diffolution of the tenacious, and throwing out whatever is offensive, nothing can be better adapted to relieve such complaints as proceed from bad humours (or at least from that morbid state of the solids which deprave the fluids) provided there be no venereal or specific contagion in the case. For the proof of this we are not left to plausible conjecture, or ingenious theory; the salutary effects produced every year on the constitutions of a number of persons, affected with these complaints, are incontrovertible evidences of the truth of our assertion.

It is probably owing to the quantity of fixed air in the Pyrmont water that so much of it can be drank, a circumstance of great importance in assisting its effects. This quantity of volatile principle is apparently the cause why this water so easily passes through the body, and why the stomach will bear it in a greater portion than any other water whatever. It never sits heavy upon the stomach; and for that reason it is not at all in use in Pyrmont, to eat any aromatic confectations with the water, as they do at Spa, and in other places, in order to assist the stomach against the dead weight of a weak and inactive (iners) water.

Having considered the principal ingredient in the Pyrmont water, fixed air, we shall now proceed to the others, iron and magnesia, which are kept in solution in it by that acid.

Next to the fixed air, the iron is, without doubt, the most material ingredient; and the larger proportion of that air in the Pyrmont water, enables it to contain also a larger proportion of this substance than most other waters. It is well known, that iron in general

neral strengthens the relaxed fibres, improves the state of the blood, by increasing the action of those organs that form it, and, in short, gives a new stimulus to all the vital motions. As the iron in the Pyrmont water is completely dissolved, and absolutely invisible, the water being as clear as crystal, it enters the body in so subtle a form, that it may easily be absorbed by the capillary vessels, and introduced into the circulating humours, where it will give a gentle and natural stimulus to the vessels, as there is some ground to suspect, that iron, introduced in a grosser form, will sometimes remain heavy upon the stomach, and do more mischief than good. The salutary effects of the Pyrmont water, and indeed of all chalybeate waters, and the cautions that must be observed not to prescribe them under such circumstances as are mentioned at the end of this chapter, shew clearly that iron, when introduced into the body *by grains*, will produce the desired effect, and that it is too active a principle to be swallowed by *drachms*. I am speaking here, I am sensible, against the common practice, at least on the Continent; but I have seen many instances, where con-

stitutions

stitutions were hurt by the received use of steel, though others certainly have borne it; but in the same way as a good constitution will bear, for a while, the immoderate use of strong liquors.

After the iron, the magnesia, which this water contains in a considerable quantity, together with the bitter cathartic, Glauber and sea-salt, come into consideration. These materials give to the Pyrmont waters the power of gently opening the body, to dissolve infarctus*, and to throw them out; meanwhile it operates as a bracing remedy. It is well known, that the effect of some of the most reputed chalybeate waters, as Spa and Schwalbach, is rather to constipate than to open the body, because they do not possess enough of these laxative ingredients. In all those cases, therefore, where we want to brace, and at the same

* Obstructions of a peculiar kind in the lower belly, occasioned by accumulations of viscid and slimy matter. They have lately been well described, and a method of cure pointed out by Dr. Kämpf, in his "*Abhandlung von einer neuen Methode die hartnaeckigsten Krankheiten, die ihren sitz im Unterleibe haben, besonders die Hypochondrie, sicher und gründlich zu heilen.*" 8vo, Leipzig, 1785.

same time to remove obstructions in the viscera of the lower belly, as is requisite in most hysterical and hypochondriacal affections, the Pyrmont water deserves, without doubt, the preference. I have known many persons complain, that during the use of these constipating waters, instead of growing better, they felt more anxiety, and suffered more from the blood being driven towards the head, than ever before.

The alkaline earth, which the Pyrmont water contains in a moderate quantity, is not without use to those stomachs in which acidity is generated; a circumstance very common to people affected with weakness of the digestive powers. The resinous matter, which, in a small portion, Mr. Westrumb found in this water, contributes to render it somewhat more agreeable to the stomach, and to strengthen it.

Thus we have seen, what effects may be supposed *a priori* to result from the constituent parts of the Pyrmont water. But it must be acknowledged, that from a chemical
analysis

analysis one cannot certainly conclude what may be the effects of a mineral water. Are we sure that nature, by her compositions, produces no other objects than we should suppose; and do not the astonishing discoveries in chemistry give ground to suspect, that the waters may perhaps contain substances, of whose existence or properties succeeding ages may know more than we do?

A very remarkable instance to justify my doubt, with respect to our sufficient knowledge of mineral waters, occurs in the waters of Balaruc in France. They contain nothing remarkable, but only so much of the common sea-salt as we should judge sufficient to occasion a little thirst when drank, and yet these waters are known to be highly purgative. Therefore; there is no judging of a remedy but by experience; and for that reason I shall adopt that plan here, and endeavour now to point out in what diseases this Pyrmont water is found to be useful, and in what cases, and under what circumstances we should abstain from it.

The Pyrmont water is known by experience to cure many chronic disorders, especially such as proceed from obstructions in the viscera of the lower belly. Its effects in these cases, after being freely drank for some time, is, to bring away a tenacious, slimy, or an atrabilarious matter. These matters have often strange appearances and different colours, and the discharge of them is generally attended with immediate relief. In three cases out of five it is these obstructions, which by their irritation, produce giddinesses, the asthma, spasmodic cough, palpitations of the heart, and an infinite number of spasmodic symptoms, or nervous disorders, lowness of spirits, hypochondriac, hysteric, and melancholic complaints; and on all such occasions the use of the Pyrmont water is found to be of the greatest benefit. In these complaints the water ought not to be drank in too small a quantity; and it has frequently been of great advantage to add some dissolvent medicines, as tartarus solubilis, or succus taraxaci, or the very efficacious visceral glysters of Mr. Kämpf*.

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* As this remedy is not yet so much known in England as it deserves, I shall explain what is meant by it.

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I did not indeed enumerate all the disorders which owe their origin to the obstructions of the lower belly, or else I should not have omitted the bad digestion, which, though not always, yet very often originates from that source, nor the constipations, the jaundice, many eruptions and bad humours that have certainly the same cause, as well as bad habits, cachexiae and other forerunners of the dropy. There are a number of instances in which
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The visceral glysters of the late Mr. Kämpf, consist of a strong infusion of dissolving and somewhat bitter ingredients, mostly herbs, and some bran. They are taken twice a day, and kept in the intestines as long as possible, which, after some use, is very easily done, when care is taken that the rectum be previously emptied by a stool. This glyster is entirely absorbed by the capillary vessels of the intestines, and experience has proved it to be a more powerful method in dissolving obstructions, or infarctus of the lower belly, than any method whatever. The following receipt may serve as an instance, which will do in many cases, but may be altered according to the circumstances.

℞ Rad. Taraxaci Herb. Fumar. — Saponar. Card. Bened. Flor. Verbasc. — Chamon. ana ℥ i furfurar. triticar. paullulum ustulatarum ℥ vi concis. D. S. Manip. ii infund. cum aquæ bullient. ℥ viii, stet in vase clauso in loco calido per horas vi dein col. et applic.

such distempers, when caused by obstructions, were cured by the Pyrmont water, and some of them are circumstantially mentioned in the description of Pyrmont, but cannot be repeated here. For the same reason it would seem, that the Pyrmont water is beneficial under those circumstances, it proves effectual against the consequences of ill-treated agues, and, what is very remarkable, it has prevented the frequent returns of that complaint, when other remedies failed; but it ought not to be drank at a period when there is actual fever.

Another general cause of many chronic diseases, is relaxation or weakness. How the distinction ought to be made between nervous debility and relaxed fibre, is pointed out in the larger work, Vol II. p 19. They are certainly two very different things, and though often combined, yet by no means exist always together. It is a dangerous thing to suppose, as many have done, that all nervous disorders originate from weakness, because it leads towards a tonic plan of cure, which, in several cases, produces very disagreeable effects. It is true, that in those called nervous disorders,

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the nervous cannot be said to be strong, or more properly, healthy, but their weakness or morbid state, which shews itself in an unnatural mobility and irritability, is not always relaxation, nor necessarily joined with it*.

In the real weakness of the fibre, or relaxed habit, no better remedy, we think, can be found, than the Pyrmont water, especially when drank at Pyrmont. It is very remarkable,

* In many cases of nervous complaints, where there is no irritating cause in the lower belly, or in the circulating humours, the French practice to treat the patients with mild mucilaginous substances, such as snails, milk, sago, oysters, accompanied by the use of the warm bath, proves very effectual. But of late they use in Germany, a remedy which is of great service to nervous people, especially during the more violent commotions; this is the strong vitriolic acid, a little dulcified with some spirit of wine, in the drink. It proves calming, and seems to lessen the irritability and the excess of feeling, whilst it is an agreeable drink. The first idea of this remedy was suggested in theory many years ago by the great Haller, in his *Opuscula Pathologica*, at the end of the volume; but the celebrated Dr. Zimmermann, at Hanover, has the merit to have it extended all over Germany. Though it may seem somewhat contradictory, it is nevertheless certain, that it agrees perfectly well with the Pyrmont water, and is very much used by nervous patients during the cure at Pyrmont.

able, how soon those that suffer from this cause grow better at Pyrmont. The steel, which is drank with the water, and the bracing volatile fluid, accounts sufficiently for it; and certainly the wholesome, dry, and bracing air of Pyrmont, and the constant living in the open air, which is usual there, contributes greatly to promote the effect.

It is very agreeable to see the change that takes place on many invalids, who arrive pale, and so weak, that they hardly are able to walk: in less than a fortnight the roses revive on their cheeks, and they can walk for miles with ease. Many nervous diseases, occasioned by the relaxation of the constitution, are thus cured by the Pyrmont water. But in these cases the water ought not to be given in so great a quantity, as in those nervous cases that proceed from obstructions, or bad humours, we mean, retrogression of eruptive matters; nor should there be any dissolvent remedy administered with the water. Purging, and every thing which debilitates, is contra-indicated, and the use of tonic and bracing medi-

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cines,

cines, and very frequently of bitters, is found very useful.

Another of the general causes of many chronic diseases are bad humours, which, when brought to the surface of the body, produce eruptions, swellings, and internally among many other complaints, if they happen to irritate the nerves, cause the most direful spasmodic disorders of every species and denomination. These are frequently cured at Pyrmont, as many instances yearly shew; and certainly the bath, in such cases, greatly augments the effects of the water. The water, internally and externally used, washes away a great deal of heterogeneous and acrimonic matters, and some of the ingredients are very ready to correct the rest. In fact, many cases are recorded, in which eruptive complaints have been cured in a short time; and also many nervous disorders, which probably were caused by a retrogression of the acrid matters.

Dr. Marcard treats of another general cause of chronic complaints, which he thinks somewhat rather neglected, proceeding from a congestion

gestion of blood towards the lower belly, which is the cause of the *vomitus cruentus* and all the hæmorrhoidic complaints. We cannot follow the ample discussion of that matter in his work, but shall only mention here, that he thinks this is very often the real cause of all the sufferings, when a poor patient is supposed to be nervous, and his supposed debility is very improperly treated with tonics.

When the regular distribution of the blood is impeded by some moveable irritation, as it is very often by obstructions in the lower belly, then the Pyrmont water is of the greatest use, and the same when it depends upon spasmodic cases; it is found less proper when the accumulations of the blood seem to be very great, or the hæmorrhoidal evacuations very copious. Many patients that suffer from hæmorrhoides come yearly to Pyrmont, and find there more relief than from any other means.

The last general cause mentioned is, the morbid irritability, or mobility of the nerves. It is true, that in a certain height of that state, where the least external irritation

produces an enormous and disproportioned effect, remedies of a more calming nature are required than the Pyrmont water is. But after the violence of that state is somewhat abated, then the Pyrmont water proved a most excellent remedy in many instances of nervous illnesses, depending on mobility only; in these cases the water is often usefully mixed with milk. Hence we conclude, that in most of the nervous diseases the Pyrmont waters prove one of the best remedies; and if there is, perhaps, any exception to be made, it will be mentioned at the end of this chapter.

Next to the nervous disorders, the gouty and rheumatic complaints are those in which the Pyrmont waters are most beneficial. This is so well known, that it is needless to dwell on it, and the number of crutches that are left by lame people preserved at Pyrmont, which augment every year, shew how many gouty lamenesses have been cured there. There is hardly a case of gout or chronic rheumatism, where the external and internal use of the Pyrmont water will not, in some measure, prove beneficial, though it is never to be used
during

during the violent and febrile attack of these disorders.

In many of the diseases of the lymphatic system, the Pyrmont water and the bath are of the greatest utility. We mentioned already some eruptive disorders caused by acrimony and badness of the humours, and must add swellings, without inflammation or fever, cachetic cases, the disposition to grow too fat, the chlorosis and fluor albus of women.

Some complaints of the head and the heart, especially when they proceed from sympathy, with some irritation in other parts, perhaps from obstructions of the viscera abdominis, find a remedy in the Pyrmont water. Yet when the maladies are founded in some organic or topic cause, we see that the water is not of any service, and, indeed, in such cases, no remedy is able to do any thing but palliate.

The weakness of the stomach and of the digestion, is one of those disorders that the Pyrmont water is most used for, and generally with success; innumerable are those who speak

with the greatest encomiums of the service they have received from the Pyrmont water, to re-establish their digestion.

Dr. M. was lately informed by a prince, well known all over Europe, that he had received extraordinary benefit from a long course, of several years, of the Pyrmont water in small doses, which, as he never was at Pyrmont, he drank at home, at about one or two glasses every morning, an hour before breakfast. Nor is it difficult to conceive, that the water should possess such virtues, when we recollect what has been said of the effect of this water upon the viscera of the lower belly. Does not the iron, together with the volatile principle, brace the stomach, and re-establish its powers, whilst the dissolving materials open the obstructed viscera, and promote the secretion of the juices necessary for digestion? Weakness of the intestines have frequently been cured by Pyrmont water; and Dr. M. relates a very remarkable instance of it, vol. II. p. 225.

That the Pyrmont water is a remedy which will, in some degree, repair the injuries occasioned by venereal excesses, is well known; and

and joined with the external cold use of the water and proper regimen. Dr. M. has seen at Pymont several excellent cures, and even some when absolute impotence had taken place from debauchery.

The Pymont water proves particularly effectual in some female disorders, such as the deficiency or scarcity of the menstrual flux. By opening the obstructed canals, by bracing the whole frame, and restoring the tone of the vessels, this complaint, the source of many others, is very often cured by the Pymont water: and the bath in general promotes very powerfully the same end.

In none of the complaints of the sex is the use of the Pymont water more successful, than in the case of sterility; but in this case we think, that, if possible, it should be used at the spring itself, and the baths joined to it. The instances are very numerous, where, after some years of matrimony having passed without children, soon after coming to Pymont, the eager wishes of the couple were fulfilled, and they became happy parents. There is

now a lady in England, who, after many miscarriages, was so reduced, that she thought she should never have a child, and for that reason thought proper to try what the Pyrmont water might do for her, and accordingly came in the summer, 1785, to Pyrmont, drank the water and used the bath ; and a few months after she left Pyrmont she became with child, and in due time was delivered of a fine girl, who is still alive. We do not pretend that absolute sterility, occasioned by organic defects, can be cured by the Pyrmont water, or indeed by any method whatever. But when it arises from obstructions in the vessels of the womb, from weakness, or ill state of health, from obstructions in the viscera of the lower belly, or a scarcity of the monthly courses, or a relaxation in the uterus itself, as seemed to be in the case just now related, much may be expected from the Pyrmont water.

There is no danger at all in giving the Pyrmont water to children, even without milk, or in bathing them in it, if their health require any such remedy. Many instances could be mentioned, where infants received benefit
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from the cure, were delivered from bad humours, eruptions, swelled bellies, and disposition to feverish diseases.

In removing the disposition, which some constitutions seem to have towards certain diseases, the Pyrmont water has very often shewn itself efficacious. We have spoken of the disposition to agues; but that is not the only one to be mentioned. Nor shall we speak here of the propensity to some chronic illnesses, against which this water is only drank with an intention to prevent returns. We mean to notice the disposition to acute and feverish diseases, particularly of the bilious kind. There are people who very often, almost every year, are attacked by a bilious fever, or such like sickness, proceeding mostly from accumulations in the lower belly. Such people I have seen at Pyrmont, in one summer, entirely cured of that disposition, and have known them for many years free from any attack of their old complaint. The disposition to colds is likewise very often cured at Pyrmont. But I think the bath does more good in the last case than the internal use of them, for the Pyrmont

mont bath, though commonly used warm, is remarkably bracing and strengthening, and does not affect like other warm baths. It seems to have a particular tonic effect on the skin, as it renders it, for a while after the bathing, quite rough and hard, when common warm baths make it soft and smooth. Indeed this effect of the Pyrmont bath is not to be wondered at, if we look at the skin of the people just coming out of the bath, which is reddish, and covered with a great quantity of ochre, or iron earth, which is in so great quantity in this water.

But it will be proper to mention here those cases where it ought not at all to be used. Any feverish complaint whatever forbids the use of Pyrmont water, I mean real fever; for there is a kind of nervous state, which might be taken for fever, without being really so, where the water would prove beneficial.

During the continuance of an ague, Pyrmont water should not be drank, though, after it has ceased, no remedy has, in some cases of frequent recidives, proved more effectual to prevent its return.

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We have seen this water unwarily used in the beginning of fevers of a bilious and inflammatory nature, and found that the patients grew evidently worse after it. It seems, the volatile as well as the martial part of its ingredients, do not agree with that agitation of nature which attends a fever. In real hectic and phthifical fevers this water can be of no advantage, though it may be less hurtful than in the others.

Another class of disorders where the Pyrmont water should not be used, or at least with great precaution, is, where we see a disposition to hæmorrhages of a dangerous nature, and especially those from the lungs. The moment when the blood is in motion, and threatens to produce a dangerous effect on the constitution, the Pyrmont water, by its nature, increases that motion; and, indeed, no bracing medicine can be thought proper in such circumstances. It has often been observed, that people during a very considerable hæmorrhoidal flux, who wished to go on with the Pyrmont water, have been obliged at last to leave it off, because they found that it evidently

dently augmented their complaint. But though the Pyrmont water is by no means the remedy, which rationally can be prescribed during a bloody evacuation; yet it may cure the real cause of that disposition, when given at a time when that evacuation is not actually present. As the cause of hæmorrhages is not so much to be sought for in the blood itself, as in some other irritation, very often in the lower belly, an opening, purifying remedy, like Pyrmont water, frequently removes the cause of that unnatural motion of the blood, when administered during the interval, and thus has cured many hæmorrhoids, immoderate menstruation, vomitings of blood, hæmorrhages of the nose, and even spitting of blood, evidently coming from the lungs. As to the last, we must make some distinctions.

The Pyrmont water never can agree with patients who have their lungs phthifically attacked, where there is ulceration, or a great disposition towards it; in those cases of a spitting of blood, which are accompanied with the marks of an inflammatory state of the blood, as it is generally the case in the real
phthifical

phthifical habit, the use of Pyrmont waters cannot be admitted. But they are not all of that kind, at least when they first make their appearance.

We shall insert here a case that occurred to the justly celebrated Dr. Zimmermann, at Hanover, which will justify this observation. A lady of a delicate constitution, who had suffered much from the hæmorrhoids, was at once seized with abundant evacuation of blood, which seemed to come deep from the lungs, and was accompanied with a violent cough. This accident was so much more alarming, as she had lost two sisters by a consumption, which began in the same way; and had she been treated with the bark, as they were, after the fashion of that time, she would very likely have shared the same fate. But her case being better understood, and the cure being directed towards opening the obstructed vessels, by applying leeches to the orificium ani, by lukewarm baths, by visceral glysters, by the use of whey and acids, the opening juices of roots and herbs, and every cooling and attenuating method, it was soon relieved, and she had no relapse

relapse of the blood-spitting. But she always looked yellow, and never was quite well till some time after that she came, by the advice of Dr. Z. to Pyrmont. It seemed, that the bracing, and at the same time attenuating virtues of the Pyrmont water, were exactly what were wanted in her case. After some weeks, she passed a great deal of variegated tenacious matter, which relieved her much, and by repeating the cure she grew perfectly well, and continued so, being now (after twelve years) alive and in health, having repeated her visit to Pyrmont every summer. Thus there are certainly cases of blood-spitting, which will admit of the Pyrmont water, while, at the same time, it must be owned, that it has done harm in others.

From the class of nervous disorders some must be excepted, likewise, wherein the Pyrmont water cannot be properly recommended. These are epilepsy, and those kinds of insanity where there is a violent agitation of the nervous system. For although after some time, the use of the water could be admitted, we should never begin with it; and where a trial

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is made, we should carefully observe, whether the strengthening powers of the remedy agree with the constitution, or, as it often happens, augment that irritability, which is the predisposing cause of the illness.

A patient should not expect that he will feel all the good effects which is produced by the water during his course of drinking; he should not be dismayed, if he must wait for that, till some time after he has finished his cure. We have often heard of, and there is really such a thing, as what they call in German *die Nachwirkung*, the *subsequent action*.

Some people do not feel that they are better during the cure, because the operation of the water produces a state of irritation in their whole frame, as perhaps any physic they should take might do, and for that reason they feel not the full good effects of it, till after they have left off drinking, and returned to their former manner of life. But something farther than this is meant by the *subsequent action*, which is every year observed, and really merits that name. When people have finished
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their stay at Pyrmont, and do not think they are much better, but after a month or two begin to feel the advantages they reaped, and come to compare the following winter with the preceding, and find themselves wonderfully relieved, they are said to have experienced the operation just mentioned. Indeed, in chronic complaints, where the waters produce a salutary effect by bracing up the solid parts, and making the bowels act with more energy to prepare better juices, all these salutary effects cannot be expected to appear very quickly, nor immediately after the *causa morbi* has been subdued. Some time must elapse before the mass of bad fluids are wholly changed for others that are pure and healthy; it must require time to change the action of the vessels, and still more, to cure the disposition they have assumed towards wrong action. And this we call the *subsequent action* of the water.

C H A P. V.

*Directions for Drinking the Pyrmont Water
with Advantage.*

IT is impossible to give any general rule for the use of this water. As different as the intentions, is the manner of taking the remedy. The common way at Pyrmont is, to begin with the water early in the morning, before breakfast, immediately after getting up, to drink every quarter of an hour a small tumbler of about five or seven ounces, to the extent of three to eight or nine tumblers, and to continue for several weeks, beginning with the smaller, and finishing with a larger number. In most cases the patient will obtain relief in three or four weeks; if the cure is not effected, an interval of a week is made.

It may seem, but it is not at all disagreeable to drink so much of this water, as its brisk taste is very pleasant, especially in warm weather, and its fixed air makes the stomach bear it perfectly well. There is, how-

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ever, a measure for each constitution, which is, as much as it will bear easily. Some people mix a little warm milk with the water, which makes a pleasant composition, and is mostly recommended to those persons for whom it is apprehended the water might be too strong; the same method is useful for children. In general milk agrees perfectly well with the water.

The time between the drinking of the glasses is filled up with walking gently about, as it should always be drank in the open air. An hour after the last glass the company breakfast, which they are generally well prepared for, as the water causes a poignant appetite. According to different tastes, the breakfast may consist of coffee, with or without milk, chocolate, cocoa, and some, that cannot bear the above beverages, find it better to take warm wine and water, half and half, and the yolk of an egg; others, one glass of wine and a bit of bread, biscuits, tops and bottoms, with the breakfast. Butter is rarely admitted, and tea seems not to agree with the water. In some very irritable constitutions, it has been found useful

useful to give a dish of chocolate before drinking the water.

If the patients bathe, they generally do it before dinner, and spend the rest of the day at meals, the play-house, the promenades, in riding, or at the card-table, and other social amusements. Much reading or writing would retard the cure; and it is observed, that the use of the water renders the eyes more irritable than usual.

It was usual formerly to repeat the drinking of the water in the afternoon, some hours after dinner; but Dr. M. does not approve of that method, and he sees, with pleasure, that it is now seldom used. There is no objection to one glass, as it gives more pleasure than other water; but as the Pyrmont water is not an indifferent drink, it should not be taken in a greater quantity. It acts powerfully upon the stomach and bowels, and affects the digestion, and therefore cannot be useful when the digestive process is going on, especially when the stomach is weak. Many people have observed this, and found themselves uneasy, and the stomach

distended after drinking the Pyrmont water in an afternoon. Though, in common, a larger quantity of this water is taken, yet there have been many instances of people, who, from the prescription of their physicians, drank less, and have found equal relief when continued proportionally. One glass every morning, drank at home, and continued for several months, has, in many cases, produced a most desirable effect, and removed complaints of long standing.

The season for drinking the water, in a full cure, is in summer, from the beginning of May till the latter end of September. But it may be used in small quantities even during the whole winter, as such a dose does not require so much exercise in the open air ; it may even be of service when drank in bed. A number of instances might be mentioned, where the use of the Pyrmont water at a distance, in very small doses, continued for a long while, produced admirable effects. We mentioned cases of a bad digestion, where this method was beneficial ; but have also known ladies, who suffered from nervous disorders, have their health restored, when they were so very weak, as not
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to be able to bear any other bracing remedy. They took every morning one tumbler of this water, now and then a little more, and were not irritated by it as by other strengthening remedies.

The preparations for the cure, (though in many cases none are required) should be regulated according to the nature of the complaint. If there is any thing to be feared from an abundance of blood, the patient may be bled before he begins ; but this is seldom necessary, and would often be prejudicial. Frequently a gentle purge in the beginning of the cure is not amiss. Some magnesia in the evening before the cure, repeated the following morning with the water, or some bitter or Epsom salt, are the best purges, as these articles are congenial with the water. The best direction is always that which is directed against the disorder, and varies, therefore, with the nature of the complaint. For instance, in those illnesses which arise from obstructions in the lower belly, nothing can prepare better for the use of the water, than a course of opening remedies, dissolving juices of herbs, like taraxacum,

tartarus solubilis, a clear whey prepared with cream of tartar, visceral glysters, and the like medicines. After such a preparation, the Pyrmont water has often been seen to put an end to the most painful and obstinate complaints.

During the use of the water, there may, now and then, be required some additional remedy, which must be determined by the circumstances. Some people are subject to constipations, and will want some opening medicines, that they may not be obliged to drink too much water, on purpose to procure stools; for though the water is somewhat purging, yet its operation is not powerful enough to overcome great costiveness. Others have a weak stomach, and feel some benefit from the use of bitters before dinner; perhaps these supply the waste of the gall washed away by the water. Many medicines of the dissolving, strengthening, purifying, alterative, and other classes, according to the different state of health, may be usefully joined with the water. Only one remark shall be added: It has often been observed, that a smaller quantity of the Pyrmont water will operate better, and
produce

produce more stools, joined with some strengthening remedy, such as the essential salt of the bark, extract of quassia, &c. than if used alone. This is certainly a circumstance which may afford subject for further enquiry ; Dr. M. frequently observed, that purging medicines in general will operate with more energy when joined with tonics.

One general rule may be laid down for those who drink the water in some quantity, which is, that they should drink as much as will keep the body open, and rather a little more so than they are commonly used to. For those who are not limited to a certain small quantity of water, it may be a good measure to drink as much as will give them a stool or two, provided not too great a quantity is required for this end. Pyrmont water, by its strong volatile part, is apt to affect the head ; and if taken in greater quantity than two glasses, will occasion some giddiness, which disappears after the first stool. Hence many will feel themselves perfectly easy and better with a great quantity, than they did with a smaller quantity of it.

The Pyrmont water is so active a remedy, that it may easily be abused, and therefore the drinking of it to an immoderate quantity cannot be approved of. There are now and then people who drink twenty or thirty glasses of it in one morning; and though the activity of this water will make it pass through the body, and a strong constitution will bear such like excesses, yet to others such a practice would prove extremely injurious.

To diet and regimen great attention ought to be paid during a serious complaint; for without this the cure will be retarded, if not altogether prevented. Those who come to Pyrmont need only to follow, with this respect, the common practice, and they will find that, with few exceptions, it is exactly right.

The hours which are kept at Pyrmont cannot but be approved of. It is usual there to begin drinking the water at six o'clock in the morning, to breakfast at nine, to bathe between ten and twelve, to dine at one, to sup at eight, and before ten every body retires, except those who are fond of gaming.

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The meals served by the cooks are all of such a quality, as are proper during the cure. To those who drink the water absent, it is only necessary to observe, that their food should be of the lighter kind; that nothing should be taken but what is of easy digestion; and great moderation, as to quantity, cannot be enough recommended. This is more necessary, as in most people the water excites a particular good appetite, so much so, that I have known some epicures, who drank every morning in their lives a glass or two of Pyrmont water, though they were in perfect health, solely with a view to increase their appetites, and to prolong the pleasure of eating.

Gross animal food, fat cheese, strong liquors, should never be used during the cure. A good deal of exercise is absolutely necessary, but it should always be moderate, and never come farther than a gentle perspiration. It is evident, that sweating is an exertion which does not agree with the use of the waters. It renders patients languid, and exhausts their strength. To rise early and keep good hours,
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during the course, greatly assists the cure. The mind should be kept as tranquil as possible, every innocent amusement sought for to entertain it agreeably, whilst deep concern about business or domestic affairs must, for a while, be dismissed, and every cause of grief, anxiety, and inquietude, diligently avoided. Though it is not proper to sit long at the card-table, yet those who like it may continue for an hour or two. But as violent passions are very injurious, playing at pharo, or other deep games of hazard, should be avoided.

A comparison has been made between the Pyrmont water and some other mineral waters of the same class in Chap. II. but nothing has been said of the artificial imitations of the same. We know, indeed, a great deal of the constituent parts of the Pyrmont water, and we may, in some measure, put them together, so far as to have a similar water. But it is difficult to communicate exactly the same quantity of ingredients to the water, and, as has been hinted, there may be articles in the composition of mineral waters which are not yet discovered. Besides, such a quantity of gas as the Pyrmont

mont water contains, cannot, without a great deal of trouble, be brought into the water by art, and then it will always give it a disagreeable taste of earth, which, perhaps, might be avoided by the invention of new machines, provided they would not make it come dearer than the natural in this country *.

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* It is with pleasure I find the same sentiments expressed by the ingenious author of the Observations on the Walton Waters, who says ; “ The analysis of mineral waters
“ undoubtedly is highly useful ; but notwithstanding the
“ perfection to which it is carried, by discoveries in modern chemistry, I apprehend it gives a very imperfect
“ idea of the real composition of the waters ; in short,
“ such an idea as dissection gives of an animated body, a
“ view of its parts, disjointed and separate, very different
“ from that union on which symmetry and life depends.

“ It is on this account that the exhibition of the ingredients, found to compose mineral waters, and the imitations of many of them, administered as medicines, fall
“ short of the waters prepared by nature, especially when
“ drank at the sources.

“ It is the same in the other parts of the Materia Medica : An analysis, in some measure, assists in accounting
“ for the operation of a medicine, but seldom enables us
“ to prepare and compound to perfection the natural productions we pretend to imitate.” Observations on the Walton Waters, by Dr. Johnston, of Worcester, p. 12.

It is hardly worth our while to mention another would-be imitation of the Pyrmont water, that was advertised some years ago in the news-papers, under the name of Pyrmont Tablets. Besides other imperfections, this preparation must have been entirely destitute of the fixed air, that essential ingredient of the water.

The fact is, the inventor of the Pyrmont Tablets wanted a celebrated name for his medicine, to draw the attention of the public to it, and chose that of Pyrmont ; but we do not know with what success.

C H A P. VI.

Of the Martial Bath at Pyrmont.

ALTHOUGH that part of the “ Description of Pyrmont,” which treats of the external use of the water in general, and the warm bath in particular, is not yet published, yet we mean to communicate here some observations, which relate to this part of the subject.

The efficacy of the baths is very considerable. They are commonly used of a temperature, nearly as warm as the blood, from 88 to 95 of Farenheit’s; yet they are not found to be weakening or relaxing. The most important bracing ingredient is, without doubt, the iron ochre, which is in so great a quantity in this water, that it tinges the surface of the whole body during the bath, lies thick upon it, and renders the skin reddish after it; this is probably the cause why the skin, after the Pyrmont bath, continues rough, and does not grow soft and supple, as it does
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after other warm baths. That some part of it enters into the absorbent vessels of the skin, is certain, because, several days after leaving off the baths, and after washing the whole body, a perspiration will tinge the linen reddish.

At Pyrmont, people generally bathe either in the very elegant and neat marble baths at the bathing house, which admit one person only, or in the bed-rooms, by means of bathing tubs; for which purpose every convenience is provided there. The greatest part of the water for bathing is put into the bath, fresh and cold as it comes from the well, and some hot water is afterwards mixed with it, as much as is required to produce the prescribed temperature. By that means, a great part of the aerial acid is preserved in the water, which is apparent from the taste, and from a whistling noise which is heard in the bath for a great while. This fixed air will probably assist in the bracing operation of the iron, by stimulating the skin; and it will also be of use in eruptive complaints, as indeed constant experience shews that it is.

It is a common idea, that all warm baths relax and render patients weak; and though they may produce salutary effects in other respects, yet ought to have this consequence guarded against. At Pyrmont such a precaution needs hardly be attended to. Dr. M. has seen many ladies there, who were of a very delicate frame, and seemed rather relaxed, at least were very weak, and could scarcely walk. He was not afraid of the warm Pyrmont baths in these cases, if their complaints required it; and many of these used the baths for four, nay six weeks, an hour, and even an hour and a half every day, and found themselves much stronger after it, than when they arrived.

We cannot point out here all the diseases for which this bath may be used with advantage, but shall mention only in general, weakness of the bowels, nervous, gouty, paralytic, rheumatic, and eruptive disorders, and particularly disorders of the sex, sterility and suppression of the menses, and lastly, the disposition to catch colds.

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The Pyrmont water is likewise externally used cold, and will certainly produce the same effect any other cold bath can have; perhaps it does still somewhat more in the strengthening way. It is true, it seems the body remains too short a while in the cold water to draw any advantage from the minerals in it; yet after a cold bathe of the Pyrmont water, taken fresh from the well, the skin is always much more rough than after bathing in the river, or in common spring water. The ladies observe this effect very strongly, when, by mistake, they wash their hands in this mineral water.

It is hardly necessary to mention, that every convenience for the different external uses of this water is to be found at Pyrmont; such as steam-baths, pump-baths, and douche; a shower-bath, and a large bath for plunging, is to be erected.

ROADS *from* ENGLAND *to* PYRMONT.

THERE are two roads to Pyrmont, the one through Holland, the other through Flanders. The first is the nearest, and takes in the following towns :

Harwich, by sea to
 Helveot Sluys, by water to Rotterdam.
 By land to Utrecht,
 Amersfort,
 Deventer,
 Delder,
 Bentheim,
 Rheine,
 Ippenbuhren,
 Osnabruck,
 Melle, or
 Oldendorp,
 Minden,
 Rintelm.

From whence one may go a direct road, or by Hameln to Pyrmont. This makes in all about 205 English miles from Rotterdam.

The other, as it is the pleasantest, so is it the more adviseable, from the preference which should be given to the shorter passage from Dover to Calais, and the superiority of the country, and the accommodation throughout the whole of the Pays Bas, which is no where more striking than on coming into Westphalia, which, by crossing the Rhine, you enter at Dusseldorf. It leads from Calais to Brussels, Aix-la-Chapelle, Dusseldorf, Duisburg, Dorsten, Dulmen, Munster, Osnabruck, &c. I should mention here, that you should not pass from Osnabruck to Paderborn, though seemingly somewhat nearer; the roads in that part are so excessively bad, that you are hardly able to pass there in any season.

This latter route, through Flanders, I should recommend to the traveller in going to Pyrmont, and the difference of distance is very small. But if he should not be straitened for time, there is a third, which is extremely beautiful, and might be chosen at least for the return. It comes from Pyrmont, by Hof-Geismar, to Cassel, Marburgh, Wetzlar, Coblenze, Bonn, Cologne, Juliers, Aix-la-Chapelle,

pelle, Bruffels, Lifle, and Calais. The difference of the distance is a mere trifle, and will be amply compensated by the variety and grandeur of the views on the Rhine, along which you pafs upon very good roads for many miles, at the bottom of romantic hills, covered with vineyards, which produce the wine known in this country by the name of Hock.

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